

ABSTRACT OF THE DISCLOSURE

A projection apparatus projects a pattern image onto an object so as to detect, by a phase difference scheme, a focus state of a phototaking system or
5 observation system. The projection apparatus includes a first projecting system for projecting a first pattern extending in a first direction to a plurality of positions arranged in the first direction and including a central focus detection region on the
10 object and a second projecting system for projecting a second pattern extending in a second direction to a plurality of positions arranged in the second direction and including the central focus detection region on the
15 object.